FIG. 1

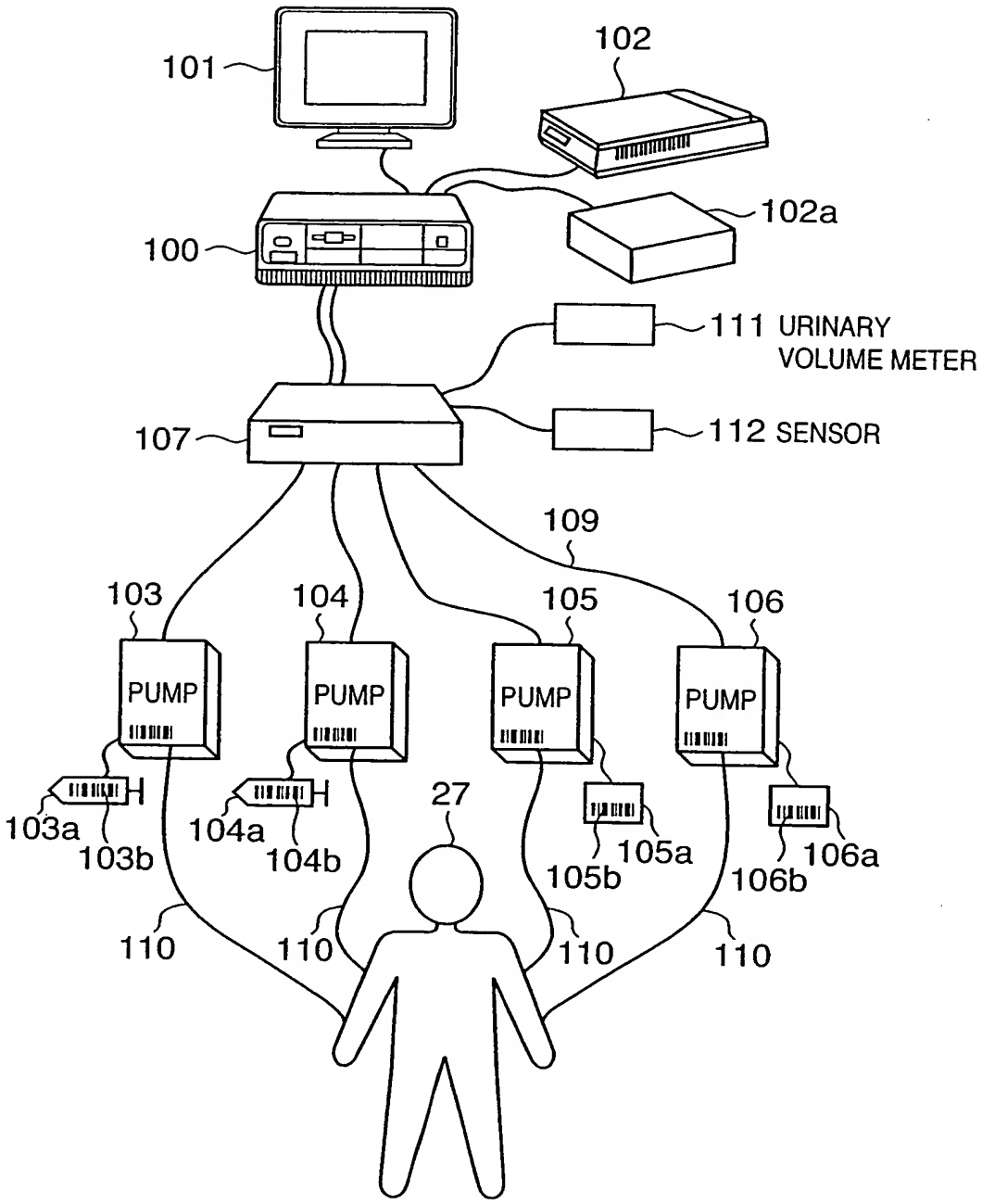

101
102
102a
100
111 URINARY VOLUME METER
107
112 SENSOR
109
103
104
105
106
PUMP
PUMP
PUMP
PUMP
103a
103b
104a
104b
27
105a
105b
106a
106b
110
110
110
110

FIG. 2

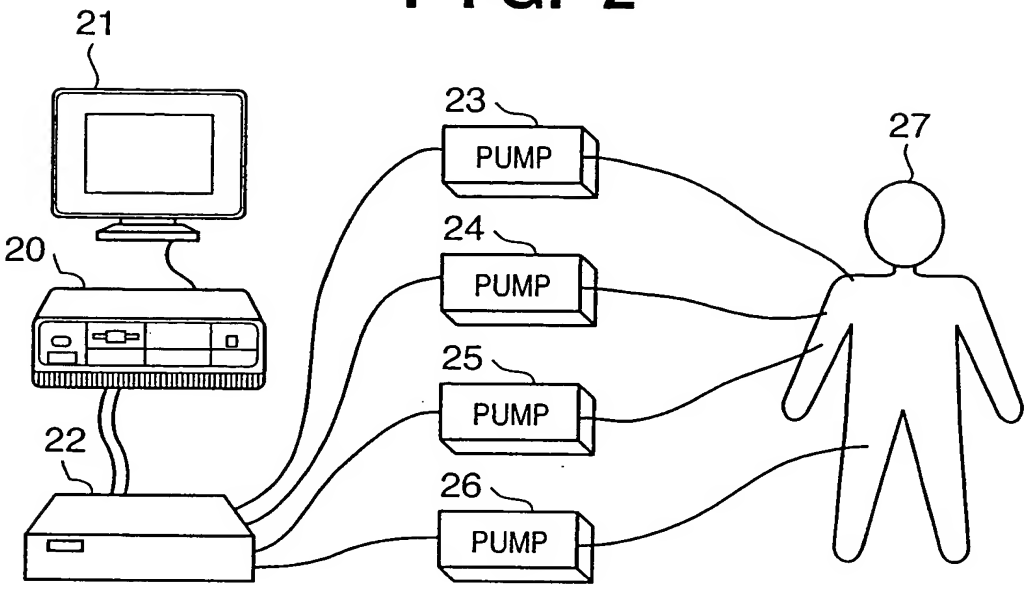

21
23
PUMP
27
20
24
PUMP
25
PUMP
22
26
PUMP

FIG. 3

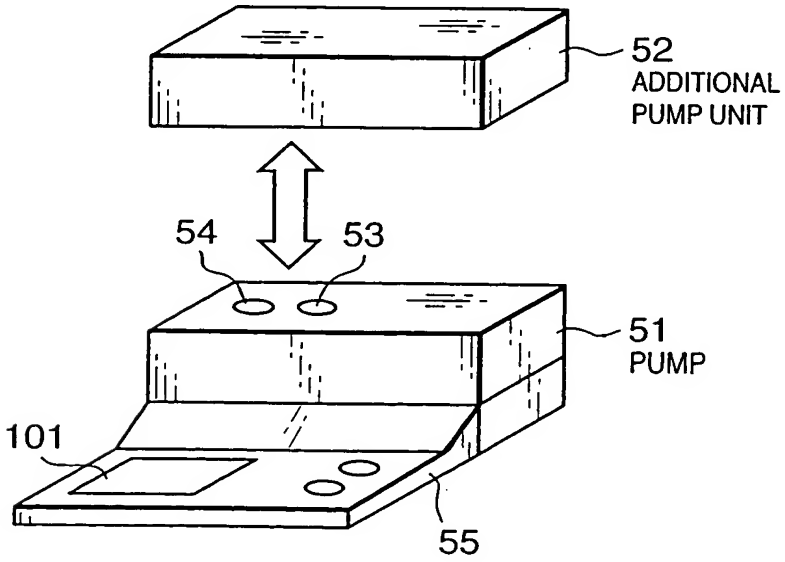

52
ADDITIONAL
PUMP UNIT
54
53
51
PUMP
101
55

FIG. 4A

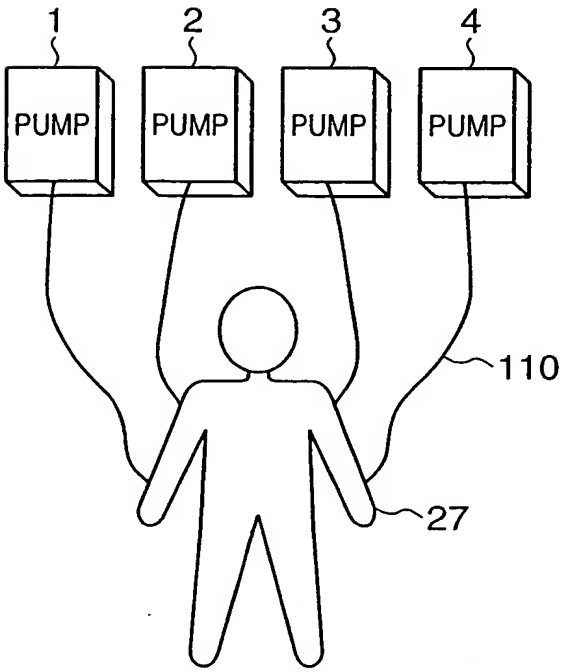


FIG. 4B

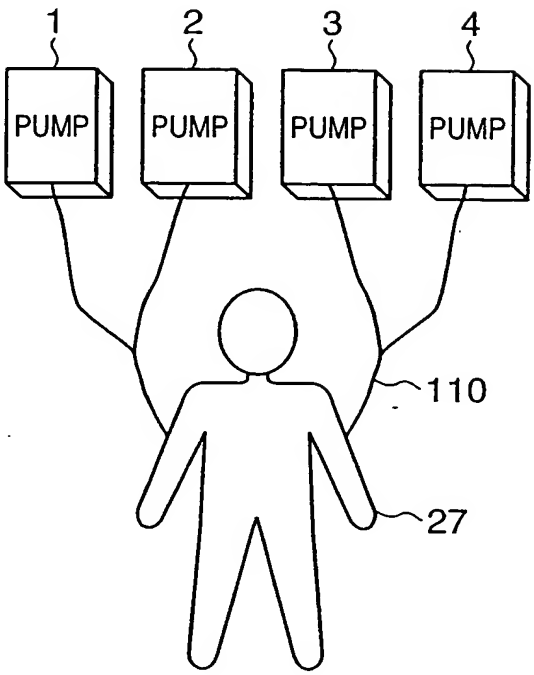


FIG. 4C

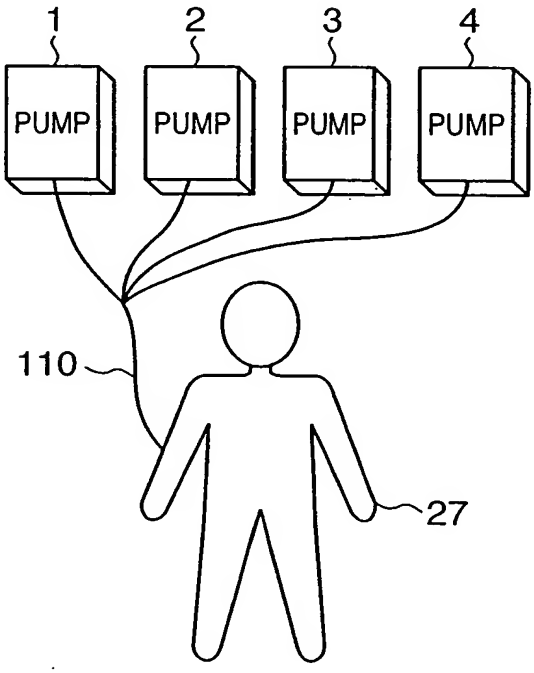
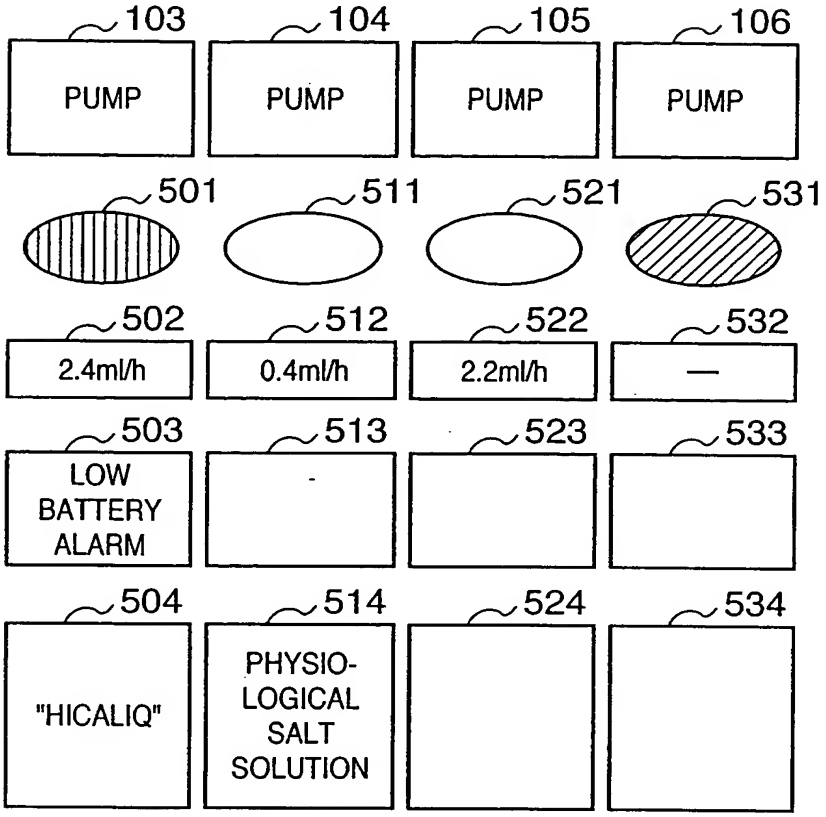


FIG. 5


103
104
105
106
PUMP
PUMP
PUMP
PUMP
501
511
521
531
502
512
522
532
2.4ml/h
0.4ml/h
2.2ml/h
—
503
513
523
533
LOW BATTERY ALARM
504
514
524
534
"HICALIQ"
PHYSIO-LOGICAL SALT SOLUTION

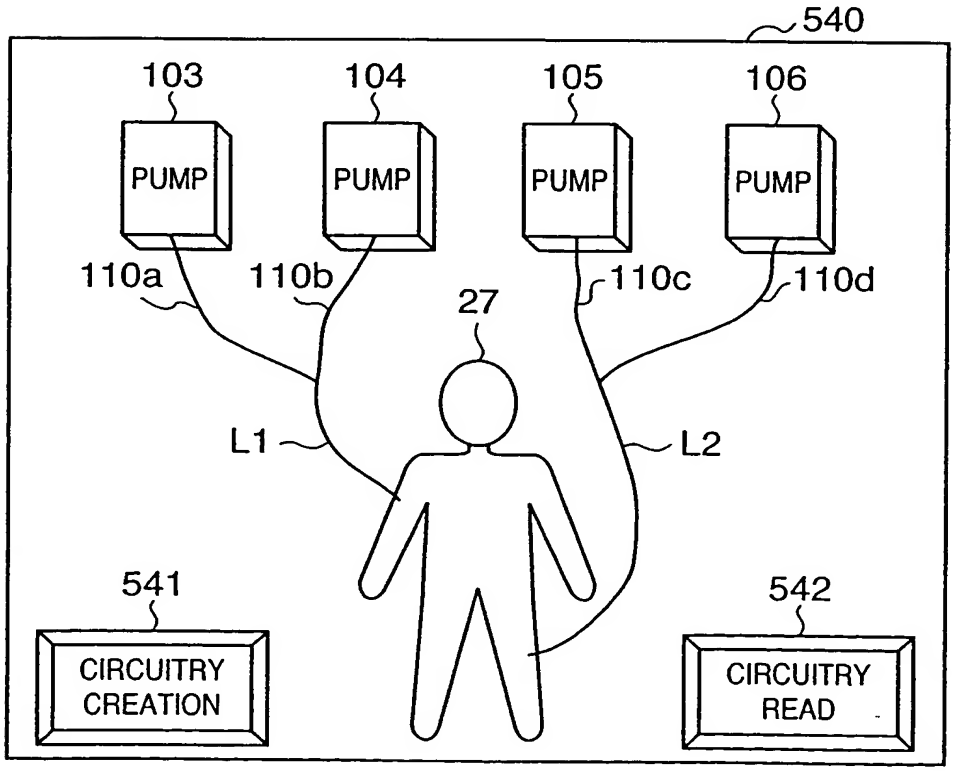

540
103
104
105
106
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
110d
27
L1
L2
541
542
CIRCUITRY CREATION
CIRCUITRY READ

FIG. 6

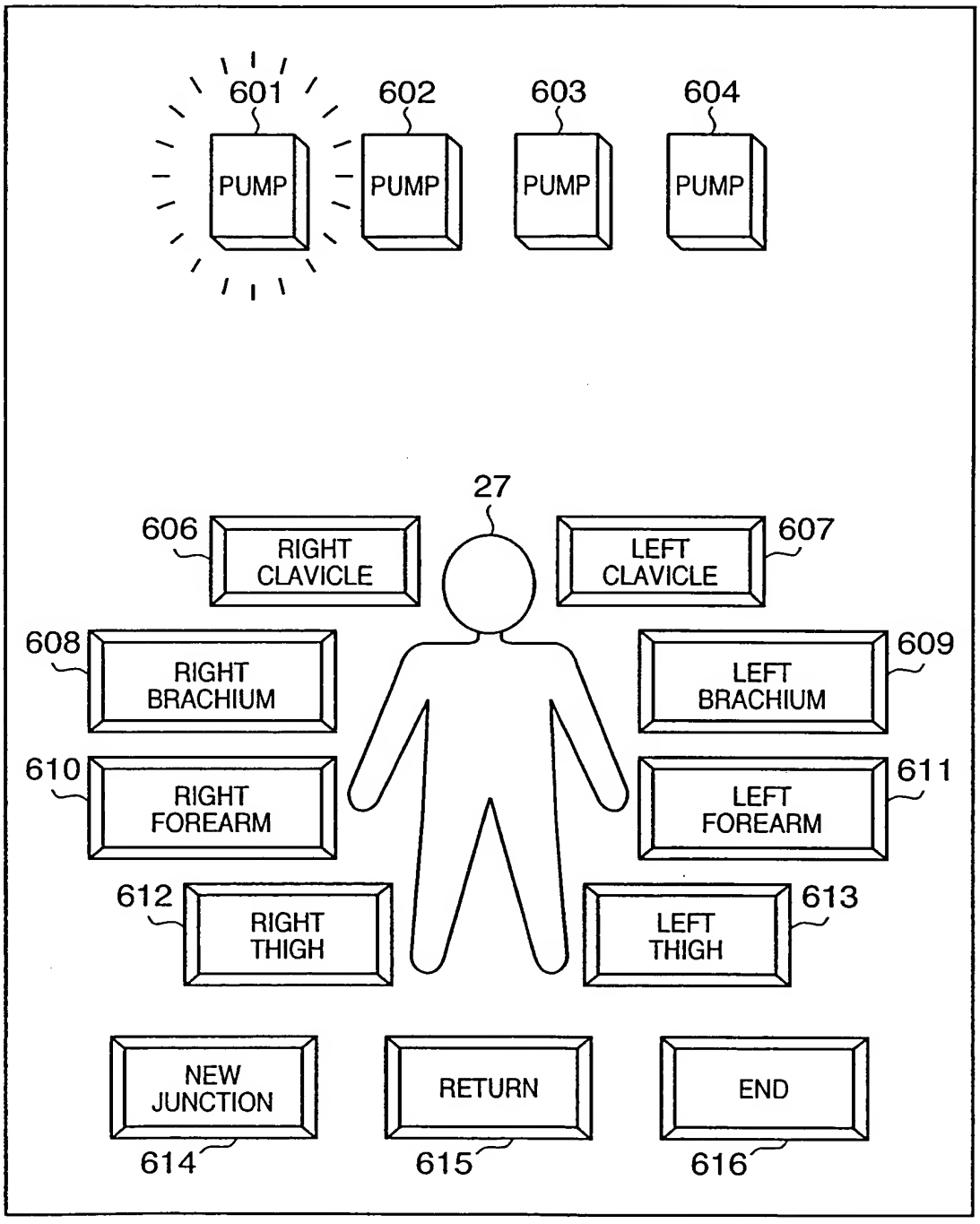

601
602
603
604
PUMP
PUMP
PUMP
PUMP
27
606
RIGHT CLAVICLE
LEFT CLAVICLE
607
608
RIGHT BRACHIUM
LEFT BRACHIUM
609
610
RIGHT FOREARM
LEFT FOREARM
611
612
RIGHT THIGH
LEFT THIGH
613
NEW JUNCTION
RETURN
END
614
615
616

FIG. 7A

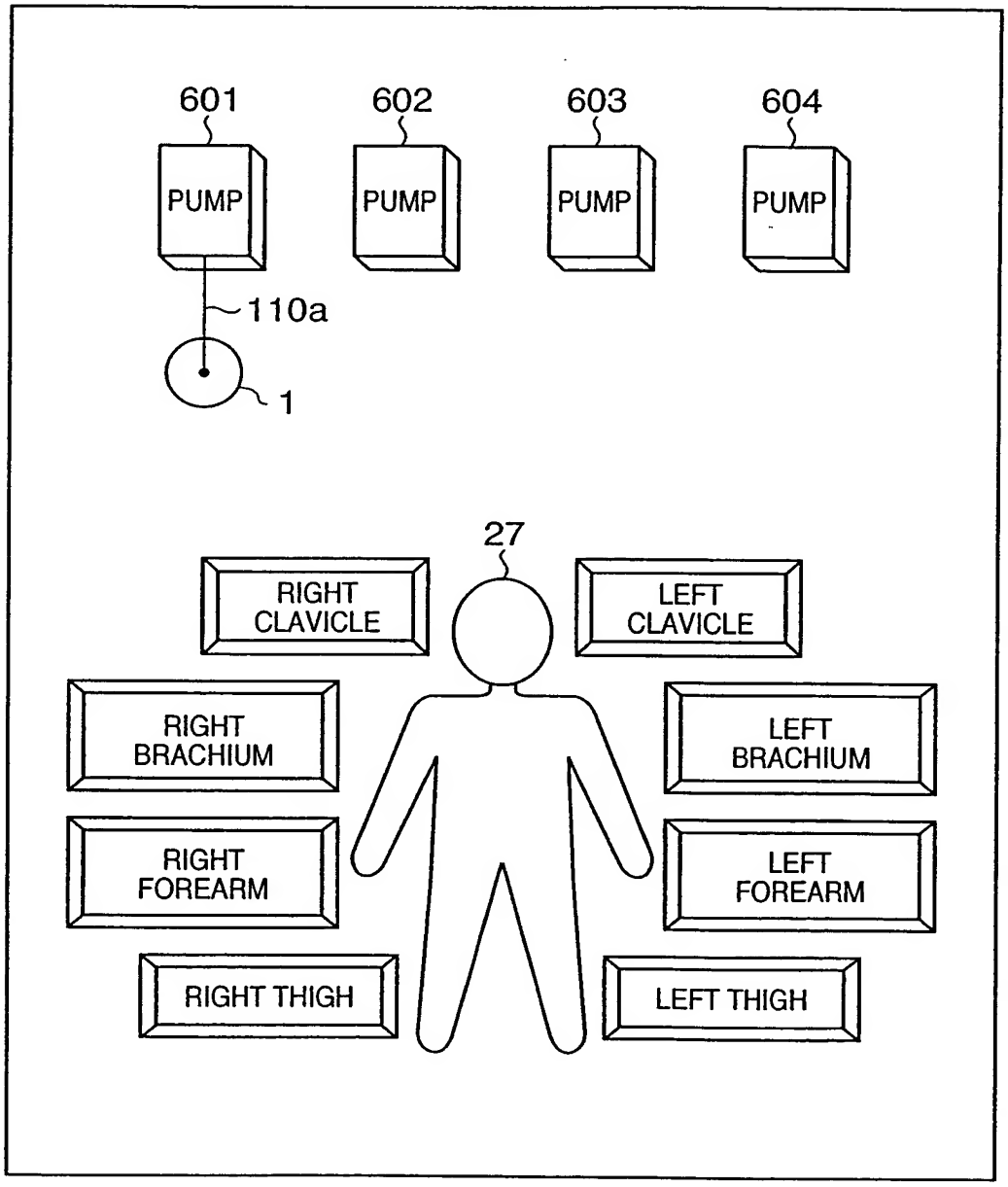

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7B

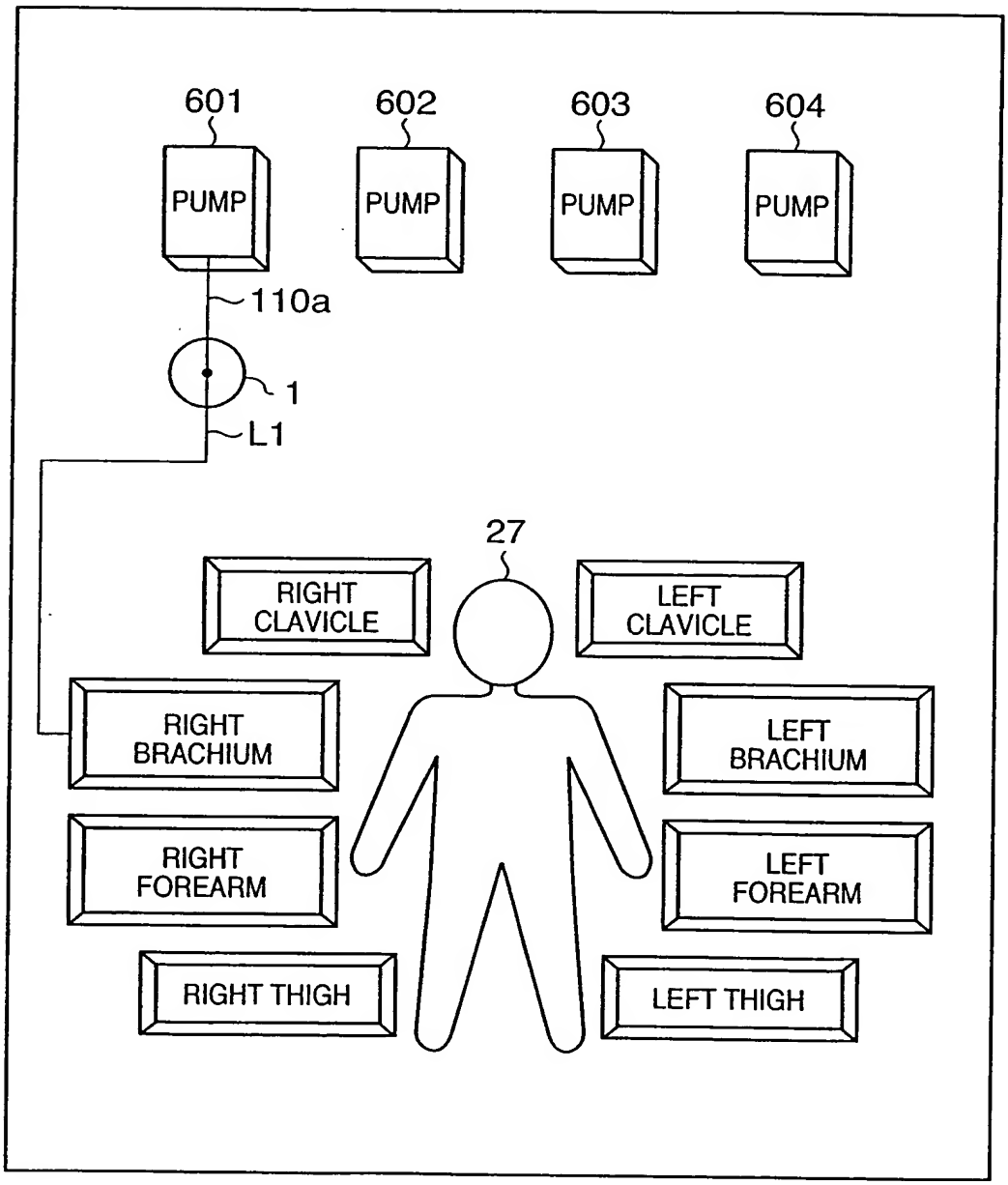

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
1
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7C

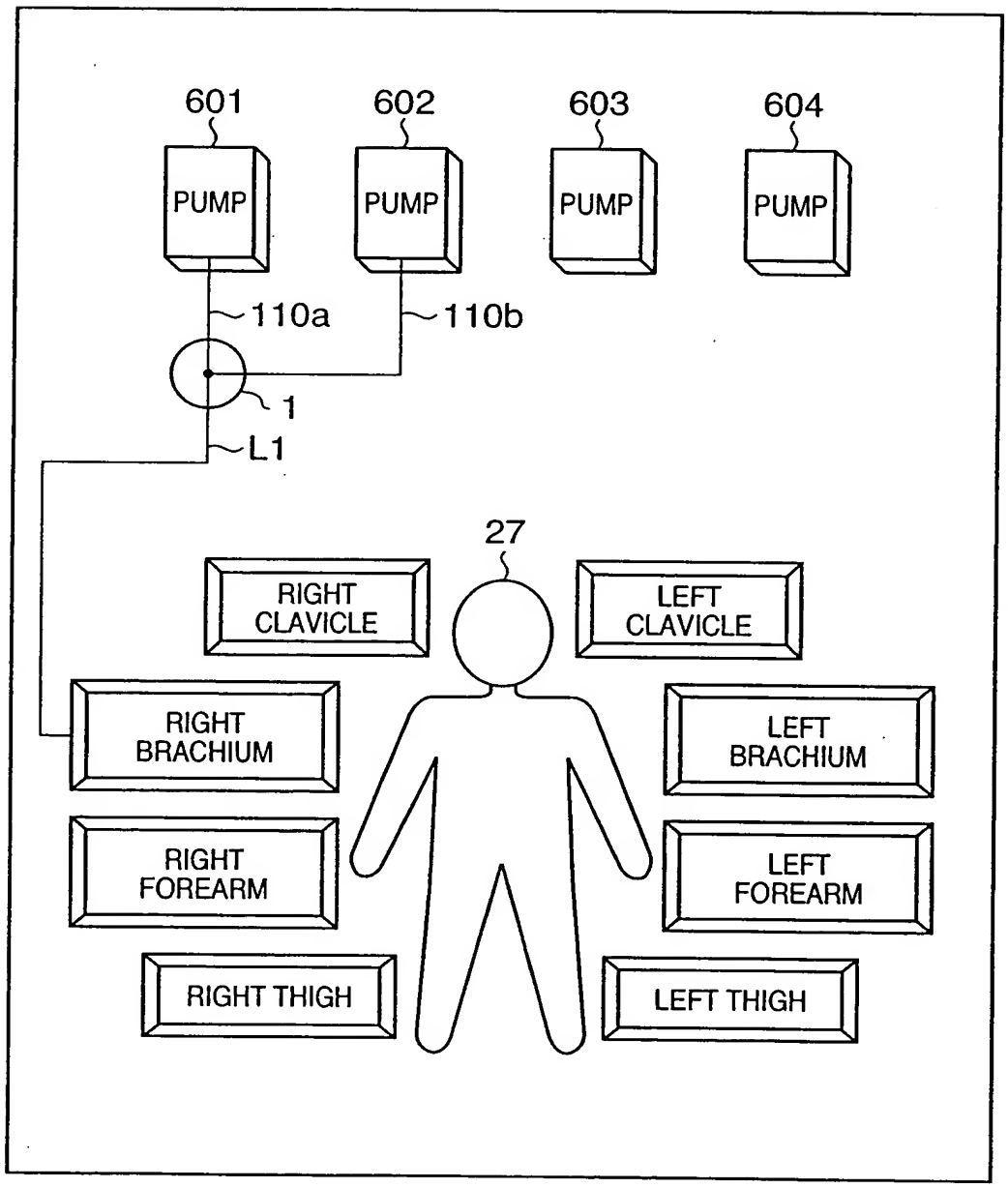

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
1
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7D

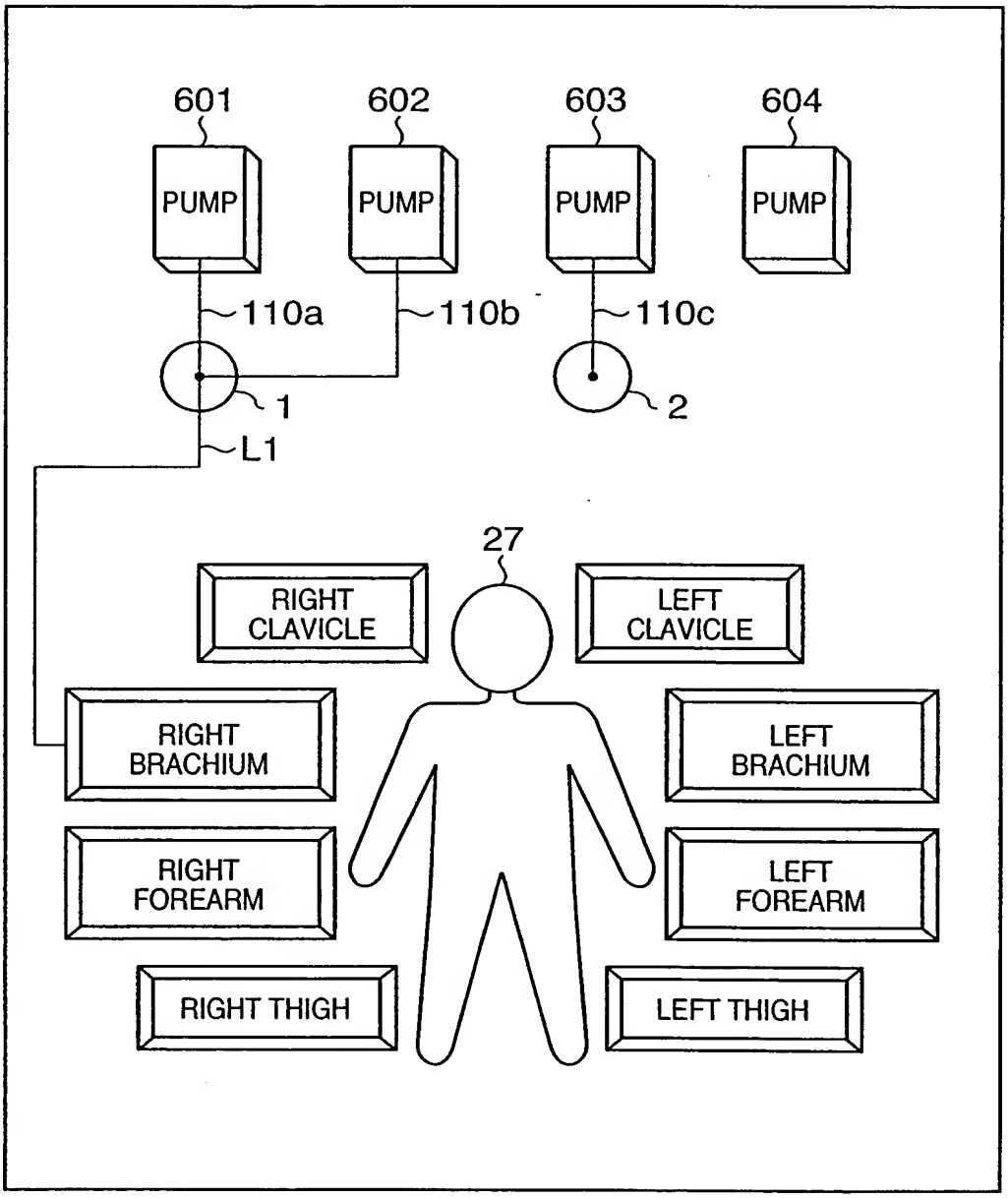

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
1
2
L1
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7E

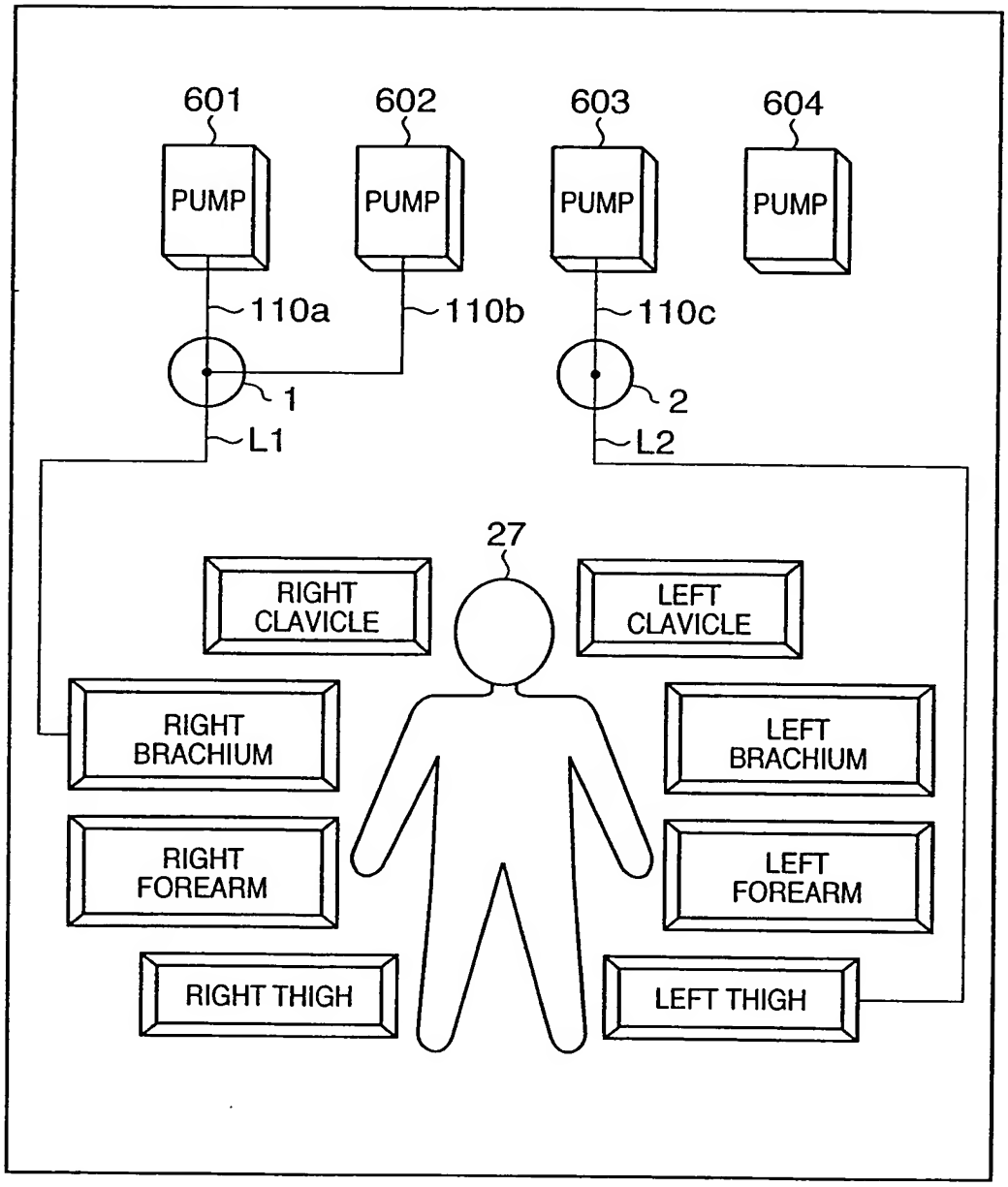

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7F

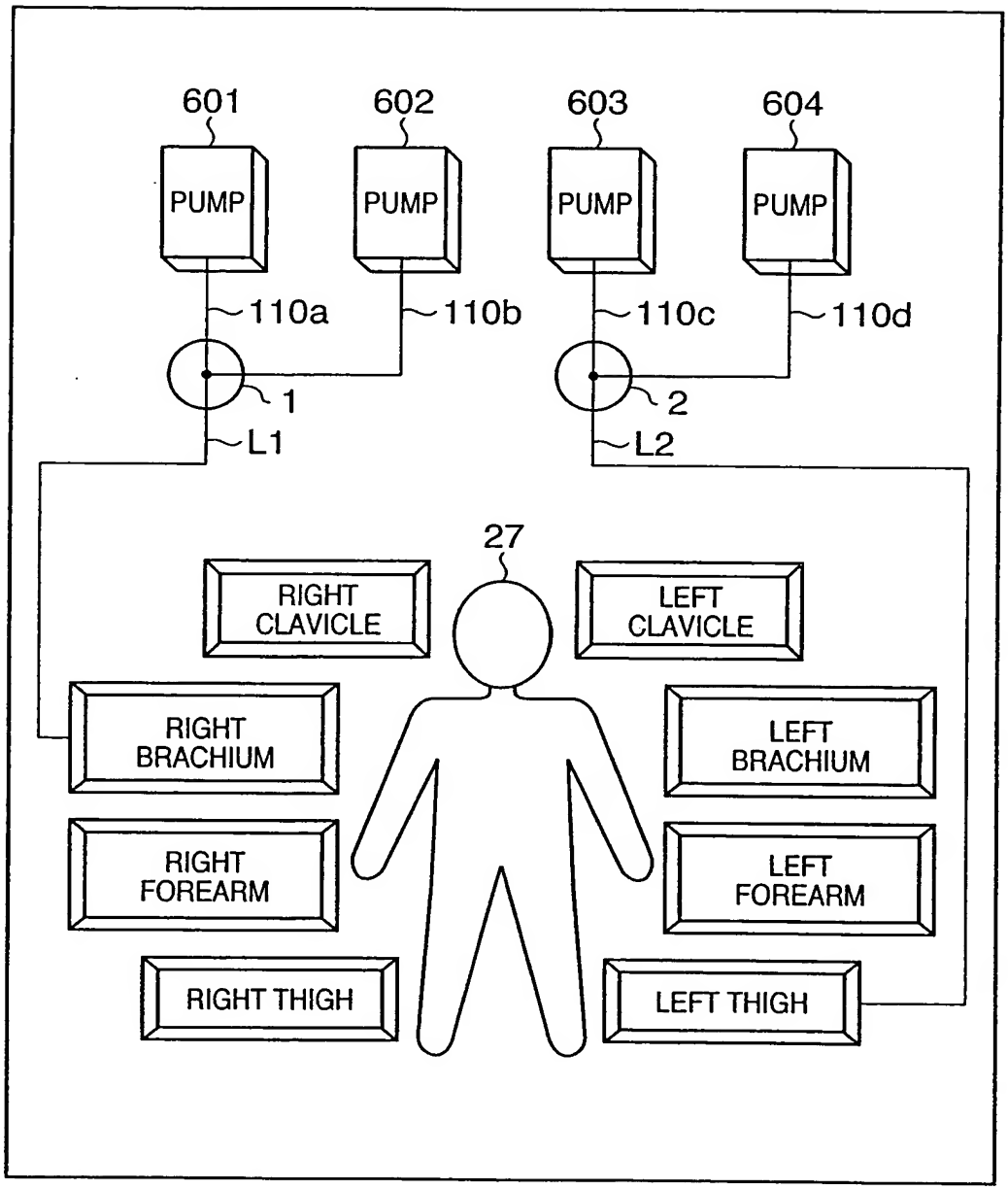

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
110d
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 7G

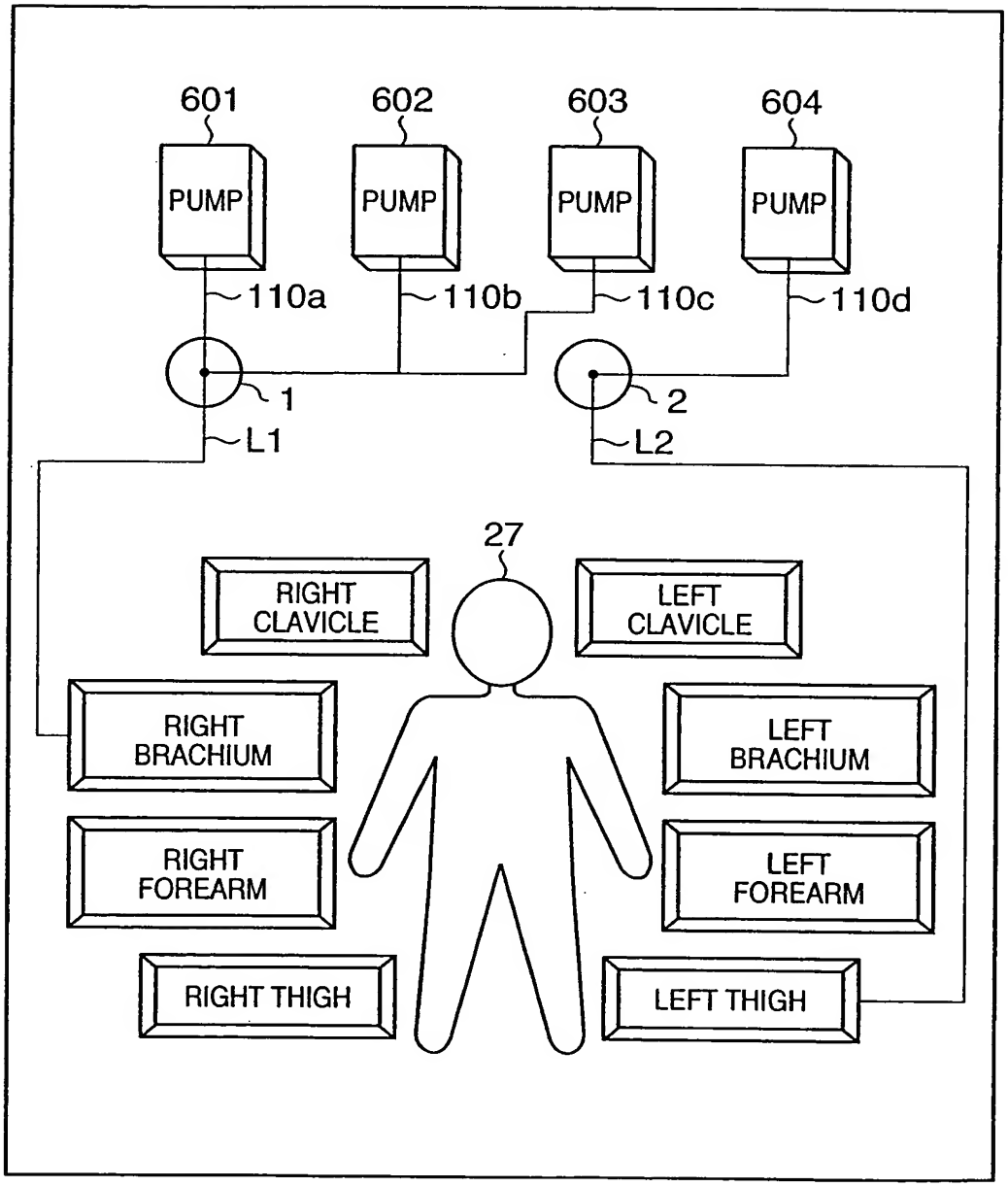

601
602
603
604
PUMP
PUMP
PUMP
PUMP
110a
110b
110c
110d
1
2
L1
L2
27
RIGHT CLAVICLE
LEFT CLAVICLE
RIGHT BRACHIUM
LEFT BRACHIUM
RIGHT FOREARM
LEFT FOREARM
RIGHT THIGH
LEFT THIGH

FIG. 8

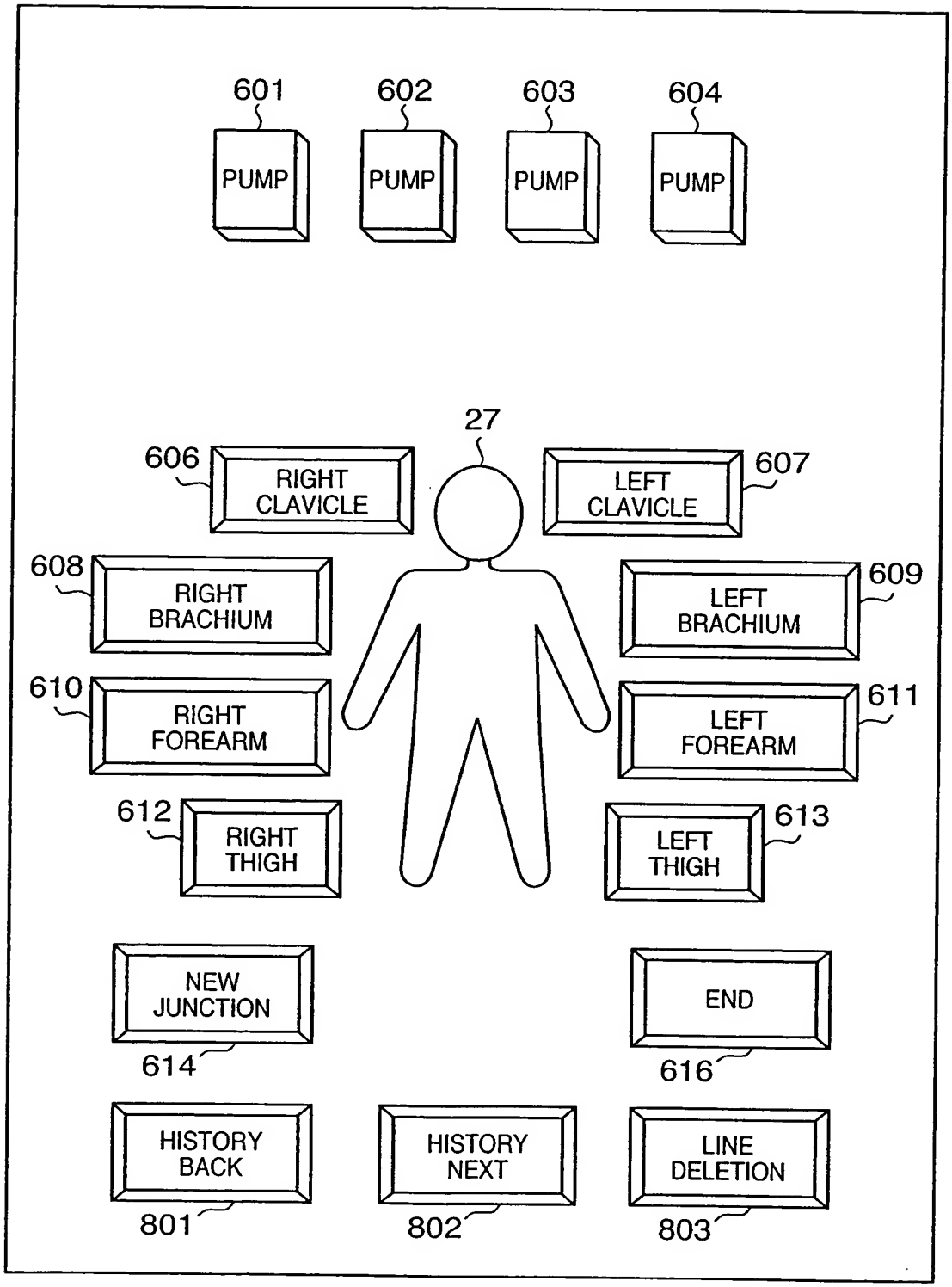

601
602
603
604
PUMP
PUMP
PUMP
PUMP
27
606
RIGHT CLAVICLE
LEFT CLAVICLE
607
608
RIGHT BRACHIUM
LEFT BRACHIUM
609
610
RIGHT FOREARM
LEFT FOREARM
611
612
RIGHT THIGH
LEFT THIGH
613
NEW JUNCTION
614
END
616
HISTORY BACK
801
HISTORY NEXT
802
LINE DELETION
803

FIG. 9

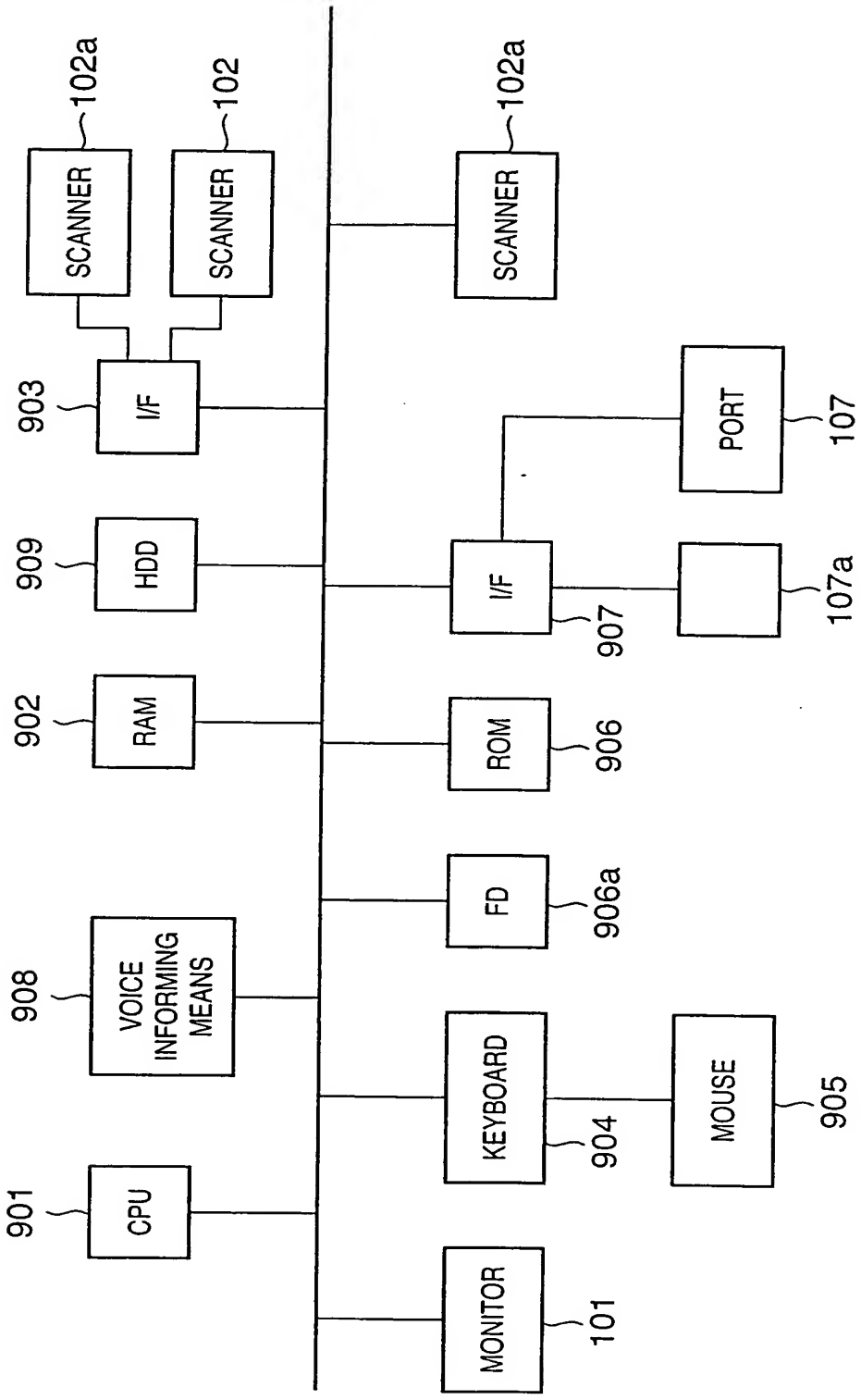

SCANNER
102a
SCANNER
102
SCANNER
102a
903
I/F
909
HDD
902
RAM
908
VOICE INFORMING MEANS
901
CPU
MONITOR
101
KEYBOARD
904
MOUSE
905
FD
906a
ROM
906
I/F
907
PORT
107
107a

FIG. 10A

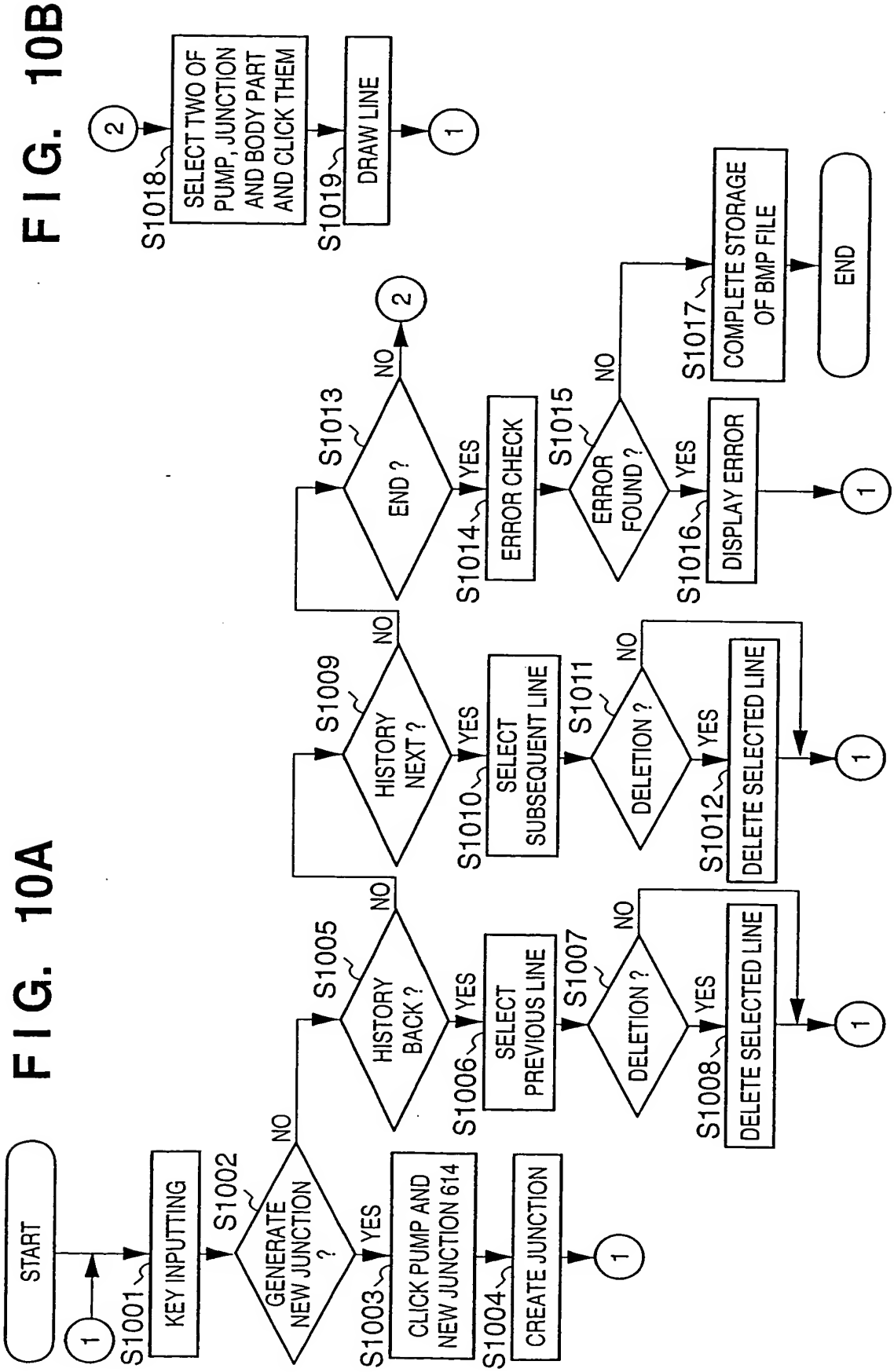


FIG. 10B

FIG. 11

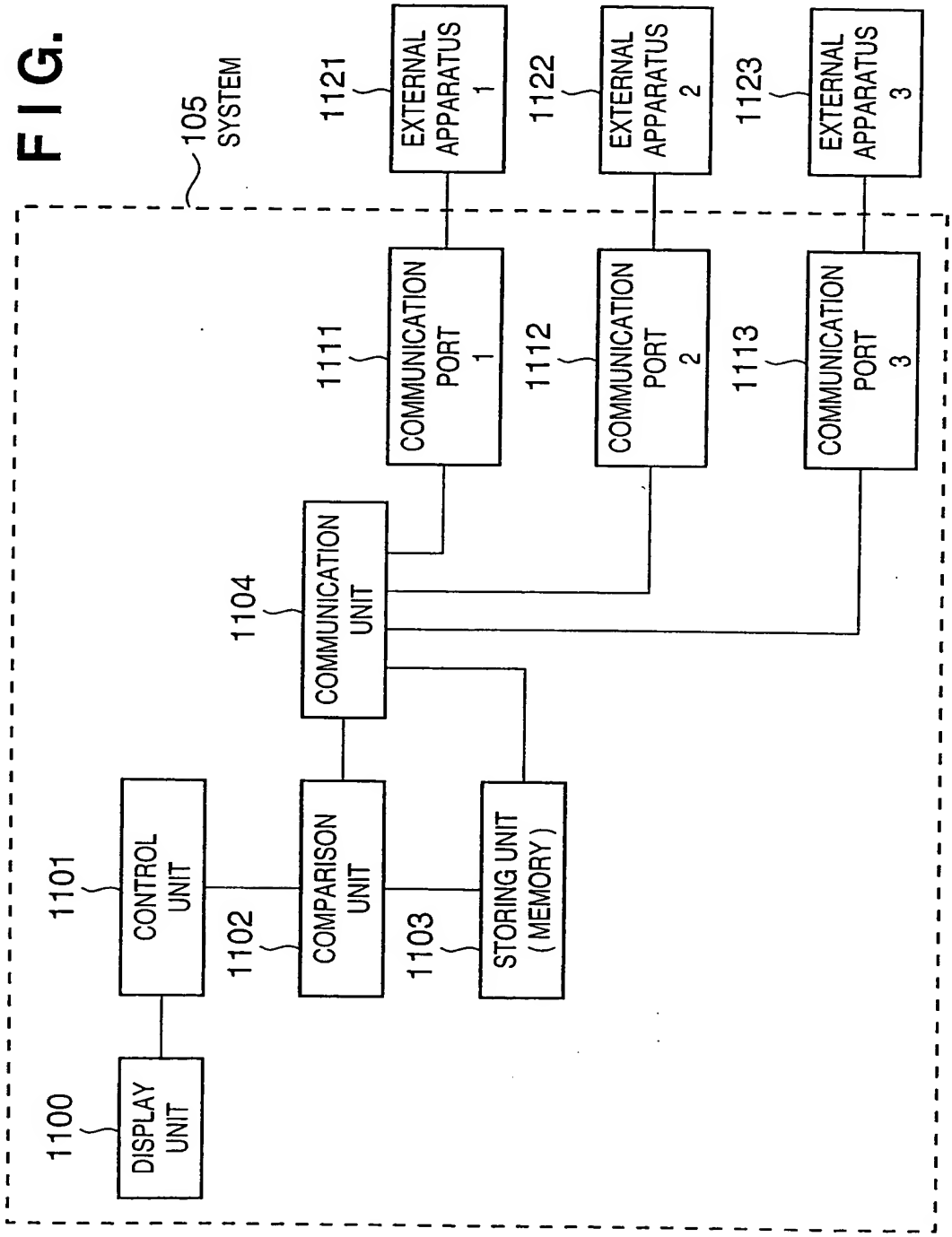

105 SYSTEM
1121 EXTERNAL APPARATUS 1
1122 EXTERNAL APPARATUS 2
1123 EXTERNAL APPARATUS 3
1111 COMMUNICATION PORT 1
1112 COMMUNICATION PORT 2
1113 COMMUNICATION PORT 3
1104 COMMUNICATION UNIT
1101 CONTROL UNIT
1102 COMPARISON UNIT
1103 STORING UNIT (MEMORY)
1100 DISPLAY UNIT

FIG. 12

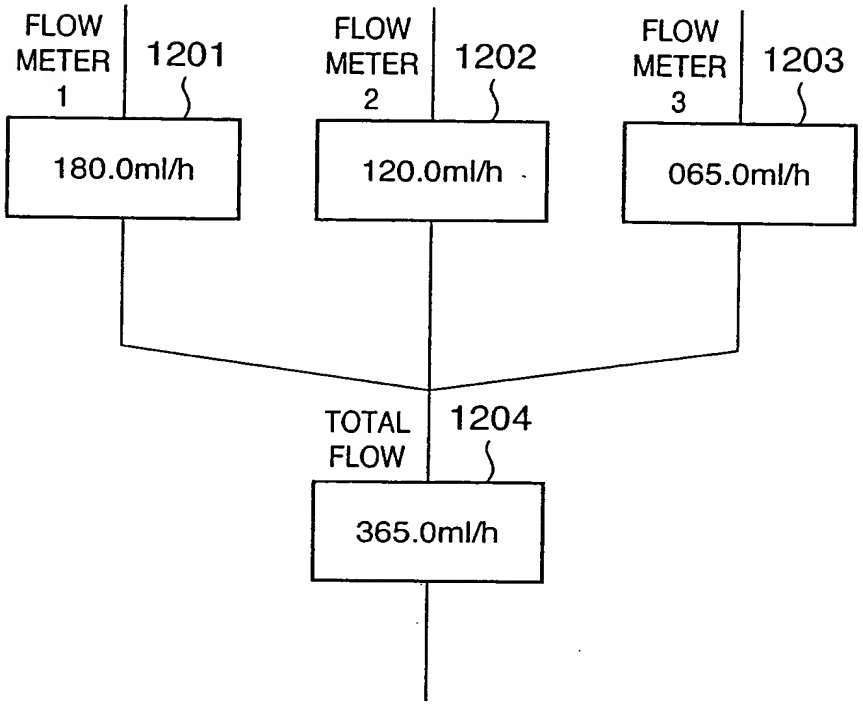

FLOW METER 1
1201
180.0ml/h
FLOW METER 2
1202
120.0ml/h
FLOW METER 3
1203
065.0ml/h
TOTAL FLOW
1204
365.0ml/h

FIG. 13

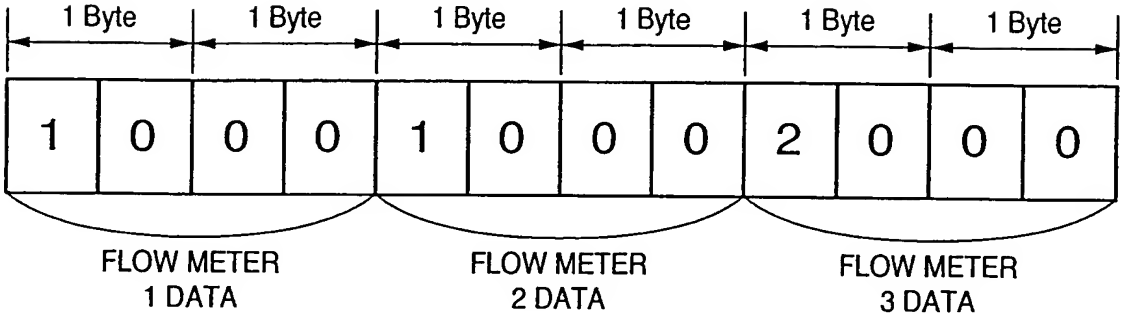

1 Byte
1 Byte
1 Byte
1 Byte
1 Byte
1 Byte
1 0 0 0 1 0 0 0 2 0 0 0
FLOW METER 1 DATA
FLOW METER 2 DATA
FLOW METER 3 DATA

FIG. 14

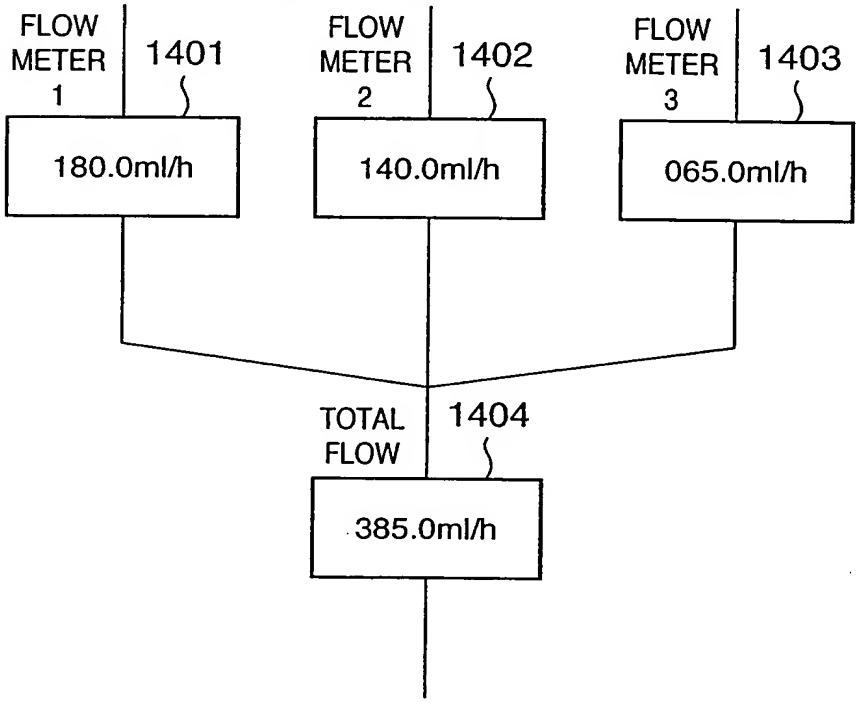

FLOW METER 1
1401
180.0ml/h
FLOW METER 2
1402
140.0ml/h
FLOW METER 3
1403
065.0ml/h
TOTAL FLOW
1404
385.0ml/h

FIG. 15

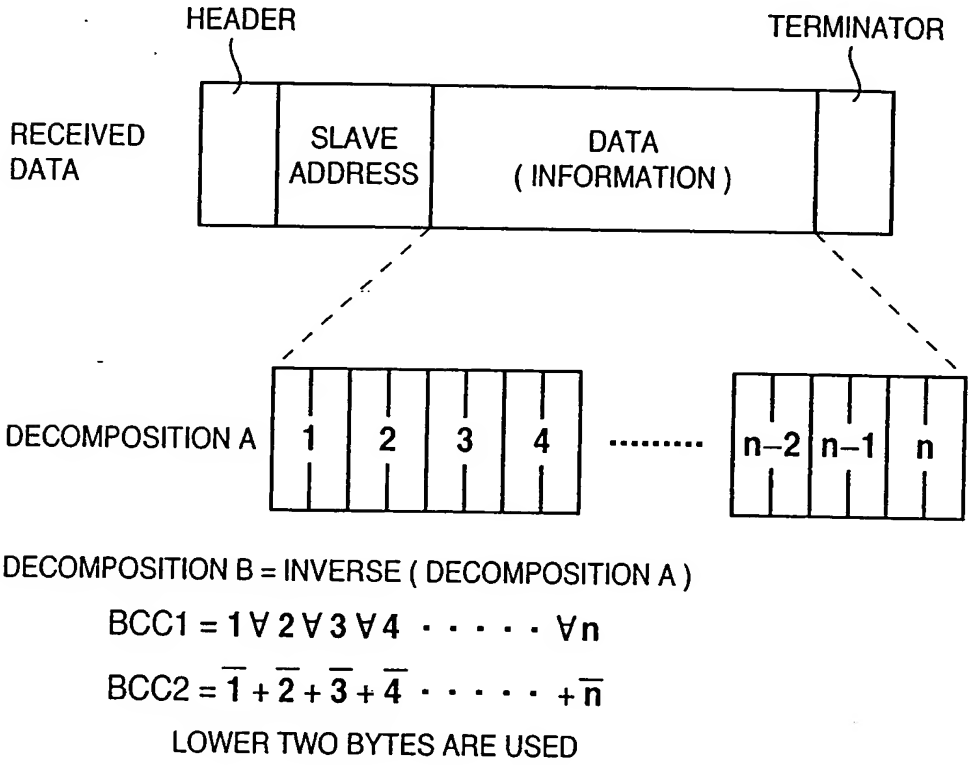

CALCULATION OF INVERSE BCC
HEADER
TERMINATOR
RECEIVED DATA
SLAVE ADDRESS
DATA (INFORMATION)
DECOMPOSITION A
1
2
3
4
n–2
n–1
n
DECOMPOSITION B = INVERSE (DECOMPOSITION A)
BCC1 = 1 ∀ 2 ∀ 3 ∀ 4 · · · · · ∀ n
BCC2 = $\overline{1}$ + $\overline{2}$ + $\overline{3}$ + $\overline{4}$ · · · · · + $\overline{n}$
LOWER TWO BYTES ARE USED

FIG. 16

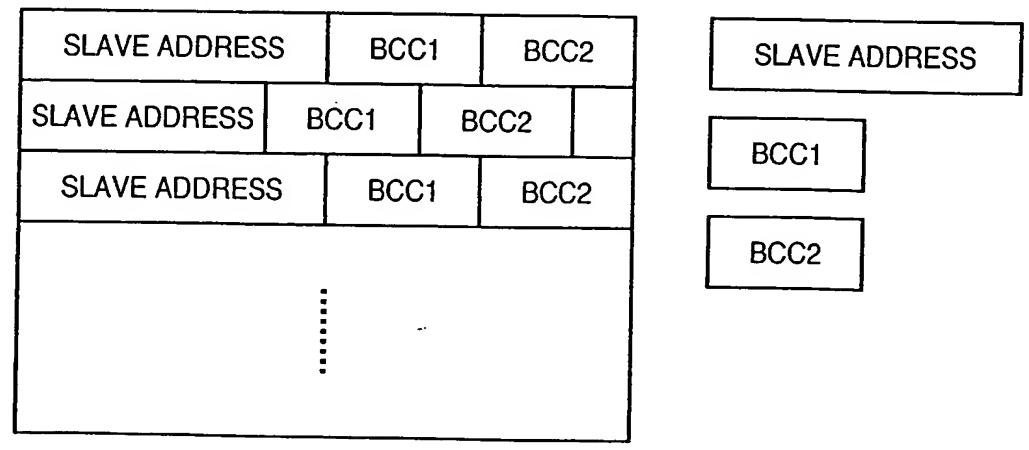

MEMORY MAP
SLAVE ADDRESS
BCC1
BCC2
SLAVE ADDRESS
BCC1
BCC2
SLAVE ADDRESS
BCC1
BCC2
SLAVE ADDRESS
BCC1
BCC2

FIG. 17

MECHANISM OF HIGH SPEED

· INVERSE BCC CHECK MODE

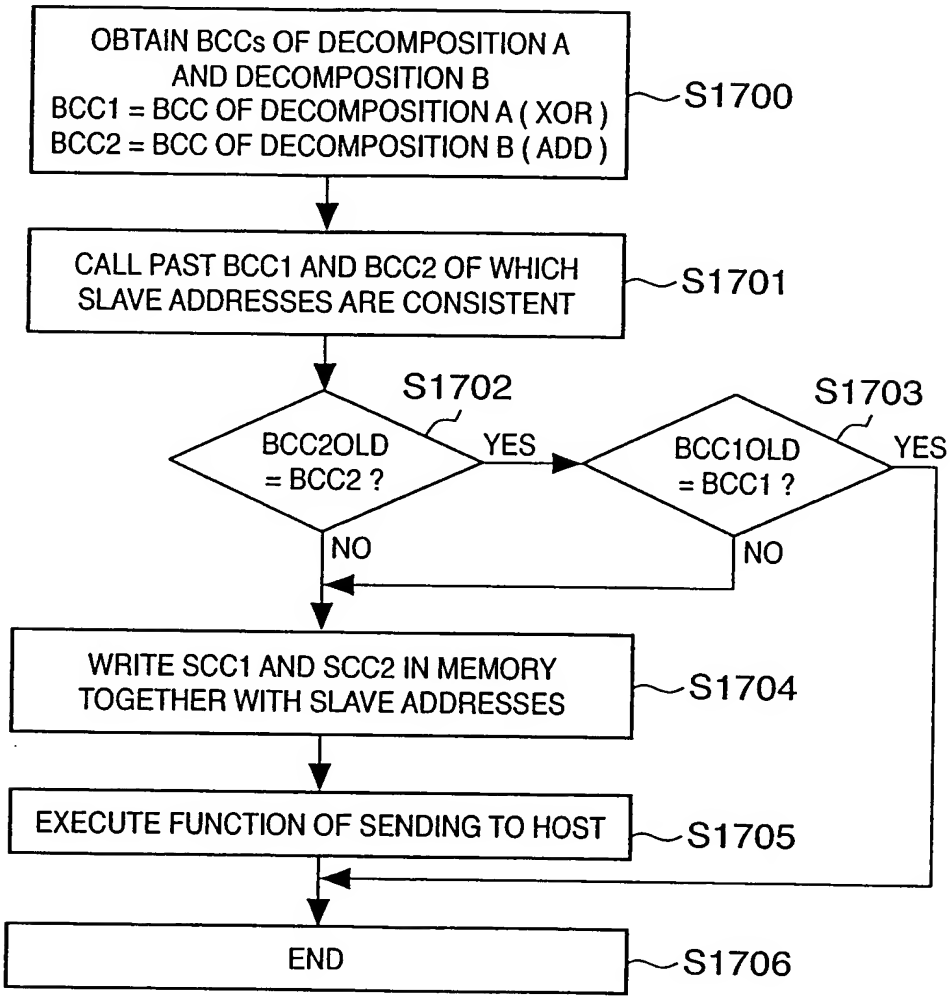
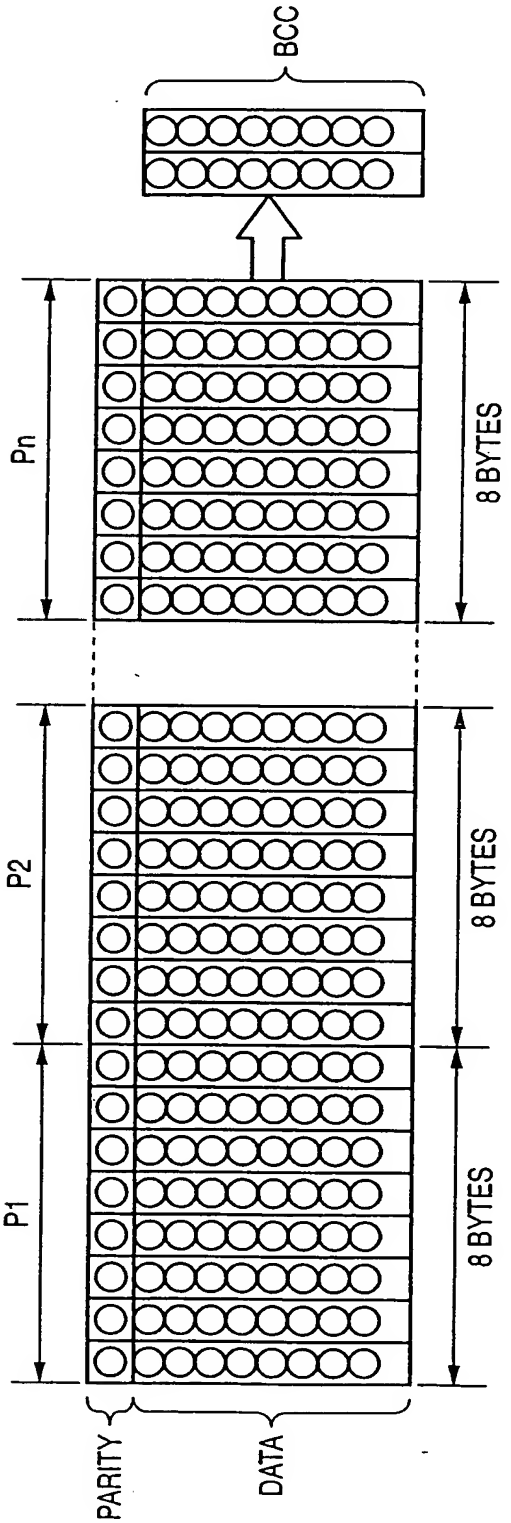


FIG. 18

METHOD OF DETECTING POSITION OF CHANGE



PARITY : 1 BIT FOR CONFIRMING THE NUMBER OF BITS FOR EACH ONE BYTE OF DATA AND MAKING AN ADJUSTMENT SO THAT THE TOTAL THEREOF IS ODD OR EVEN NUMBER
Pn : PARITY PUT TOGETHER FOR EACH EIGHT BYTES OF DATA
THE POSITION OF CHANGED DATA CAN BE CONFIRMED BY COMPARISON OF Pn

FIG. 19

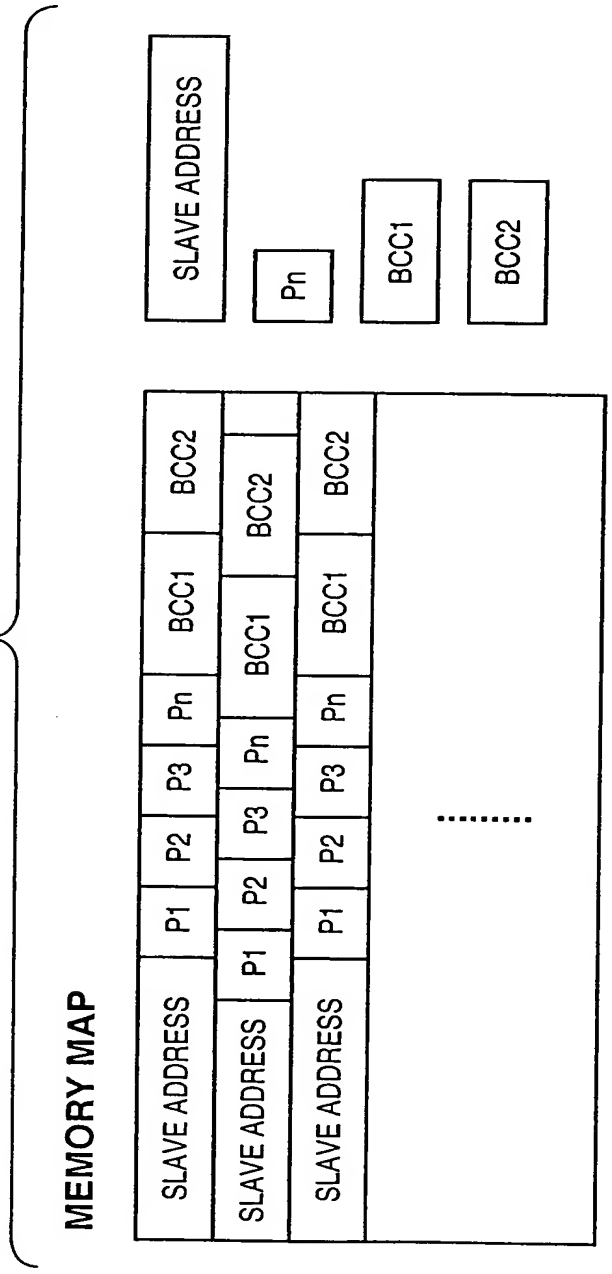

MEMORY MAP
SLAVE ADDRESS
P1
P2
P3
Pn
BCC1
BCC2
SLAVE ADDRESS
P1
P2
P3
Pn
BCC1
BCC2
SLAVE ADDRESS
P1
P2
P3
Pn
BCC1
BCC2
.....
SLAVE ADDRESS
Pn
BCC1
BCC2

FIG. 20

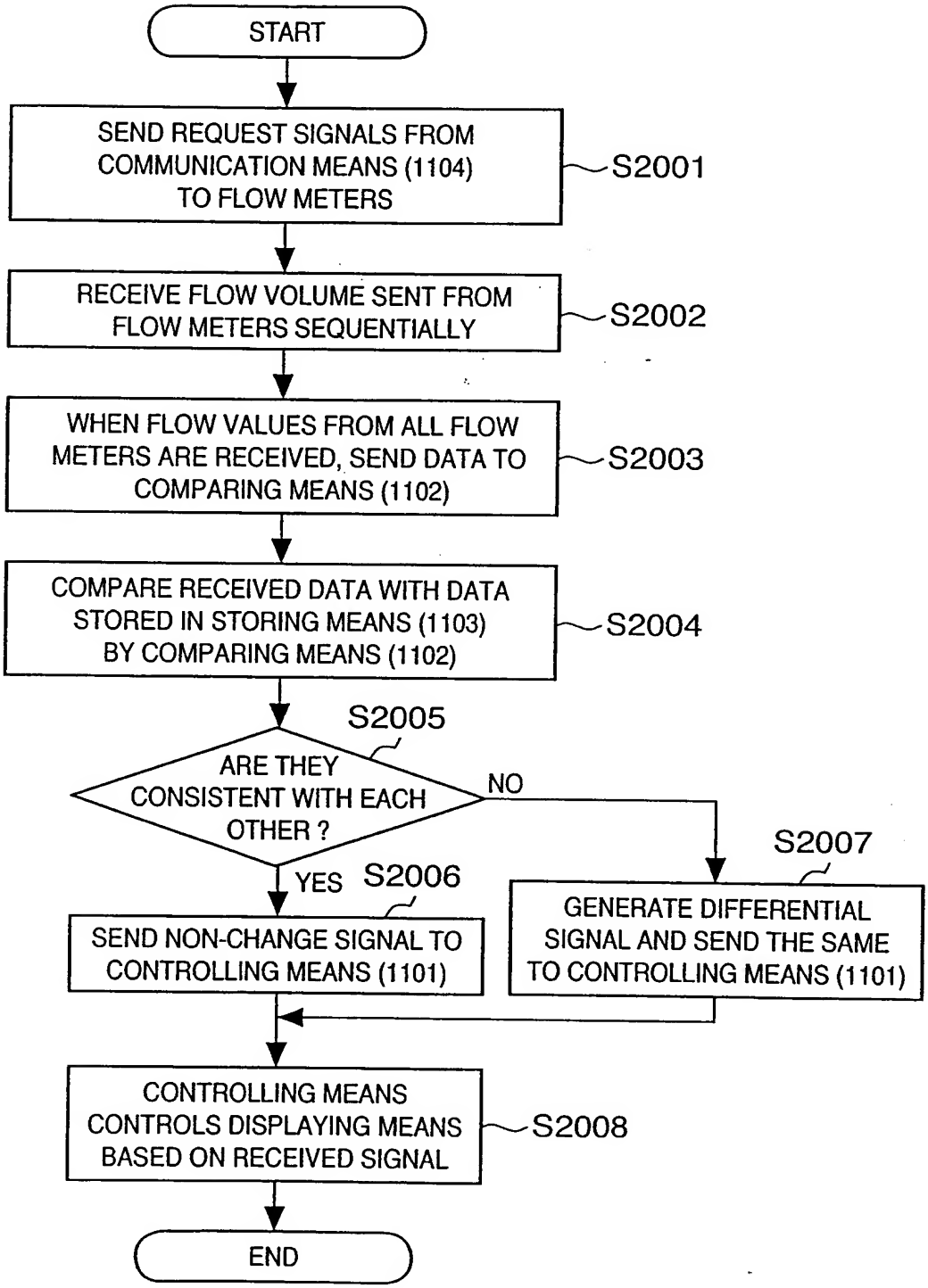

START
SEND REQUEST SIGNALS FROM COMMUNICATION MEANS (1104) TO FLOW METERS
S2001
RECEIVE FLOW VOLUME SENT FROM FLOW METERS SEQUENTIALLY
S2002
WHEN FLOW VALUES FROM ALL FLOW METERS ARE RECEIVED, SEND DATA TO COMPARING MEANS (1102)
S2003
COMPARE RECEIVED DATA WITH DATA STORED IN STORING MEANS (1103) BY COMPARING MEANS (1102)
S2004
S2005
ARE THEY CONSISTENT WITH EACH OTHER ?
NO
YES
S2006
SEND NON-CHANGE SIGNAL TO CONTROLLING MEANS (1101)
S2007
GENERATE DIFFERENTIAL SIGNAL AND SEND THE SAME TO CONTROLLING MEANS (1101)
CONTROLLING MEANS CONTROLS DISPLAYING MEANS BASED ON RECEIVED SIGNAL
S2008
END

FIG. 21A

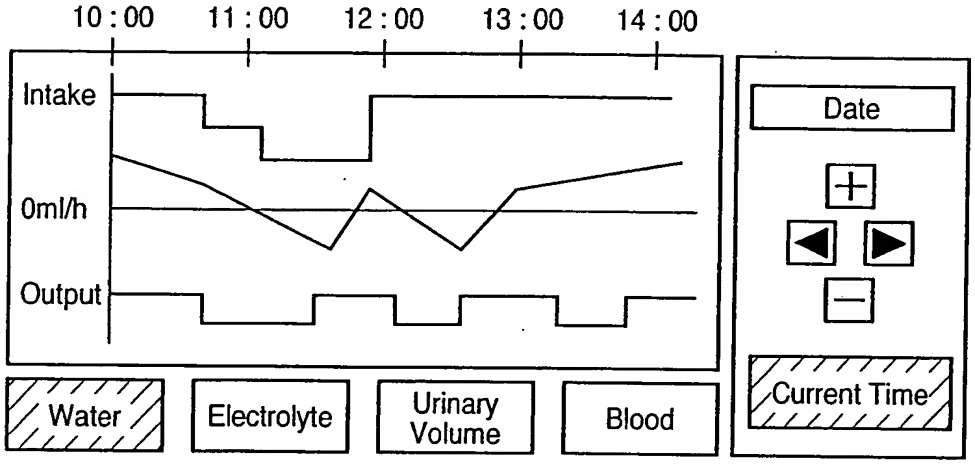


FIG. 21B

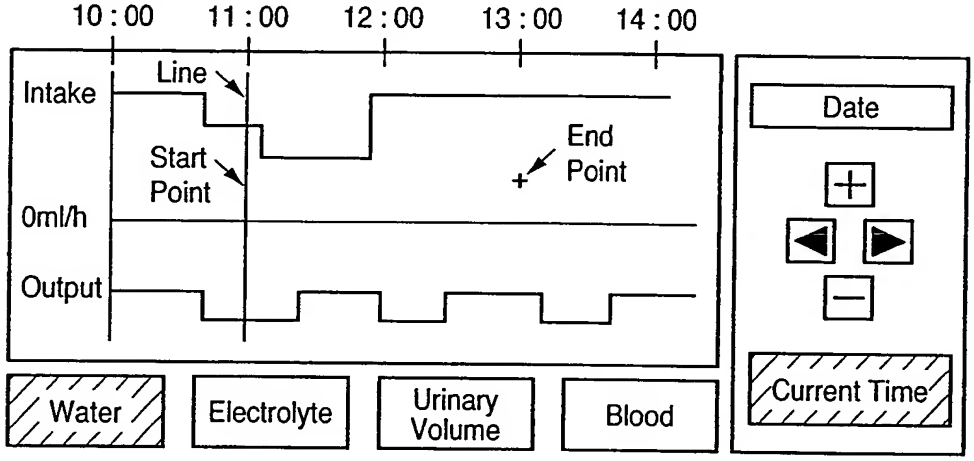


FIG. 21C

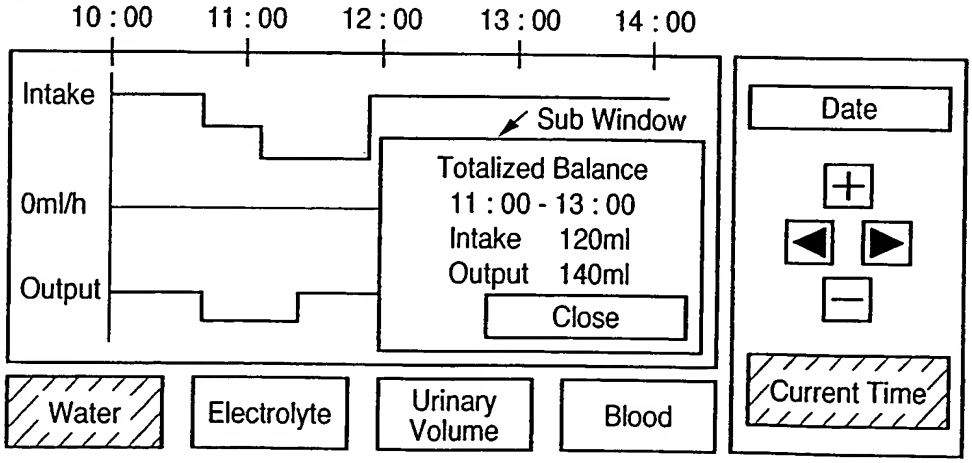


FIG. 22A

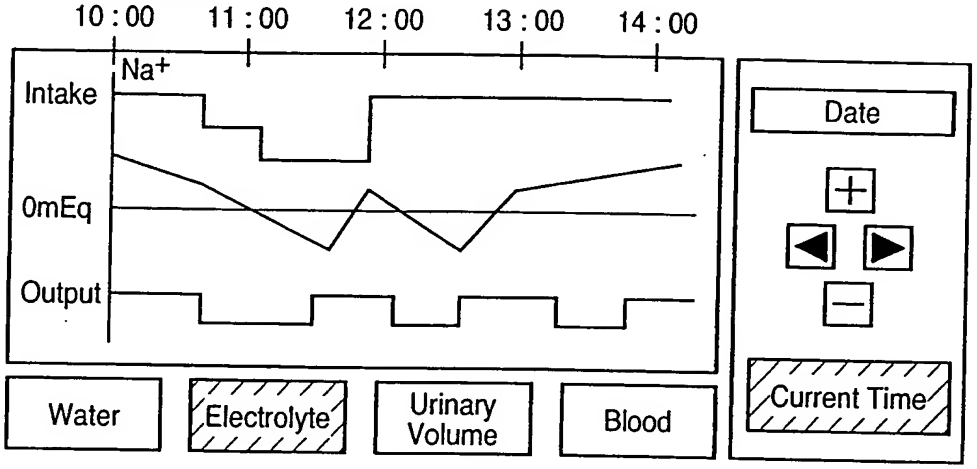


FIG. 22B

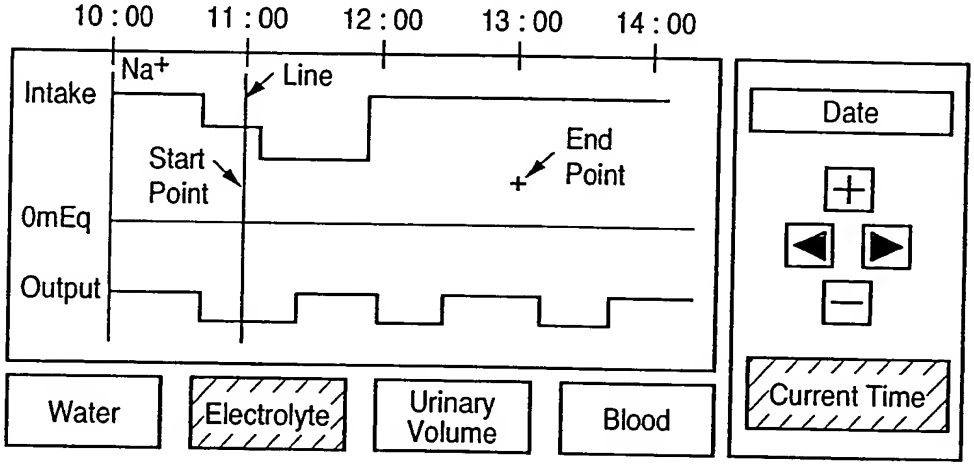


FIG. 22C